§804. Moreover, "if a 'provisional' nonstatutory obviousness type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later filed application is rejectable on other grounds, the Examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer."

The rejection of claims 17-18, 23-35, 39, 41, 44-45, 50-66, 68-70, 87-89, 93-96, 98, 101-109, 112-114, 117-118 and 120 as obvious under 35 U.S.C. §103 in view of Chatigny et al. 5,673,041 in view of Thurn 6,107,722 is respectfully traversed. This rejection confuses two distinct claim elements. One claim element is a substrate having a raised surface or mesa 22 that defines an acoustic wave cavity 20 as shown, for example, in Fig. 3 such that the acoustic wave cavity 20 has a thickness b_c extending from a surface 76 of the mesa 22 through the mesa 22 and substrate 14 to the surface 28 of the substrate. The length 2a and width w of the acoustic wave cavity are respectively defined by the length and width of the raised surface area or mesa 22. The acoustic wave cavity substantially traps an acoustic wave within the boundaries of the cavity, i.e. surfaces 76 and 28 with length 2a and width w so that when a user touches a surface of a cavity, e.g. 28, the touch is detected by the acoustic wave switch 12. However, a touch on a surface of a substrate other than the acoustic wave cavity 20 will not be detected because there is substantially no acoustic wave energy in the substrate outside of the boundaries of the acoustic wave cavity 20.

The second claim element is a transducer which is separate and distinct from the acoustic wave cavity. This is shown, for example, in Fig. 3 where the transducer 26 is mounted on a surface of the acoustic wave cavity 20 but the transducer does <u>not</u> defined the acoustic wave cavity. It is the raised surface or mesa 20 that defines the acoustic wave cavity, not the transducer 26. The transducer 26 merely generates an acoustic wave and imparts that acoustic wave into the acoustic wave cavity 20.

The Office Action confuses these two distinct and separate claim elements: (1) a substrate with a raised surface or mesa defining an acoustic wave cavity; and (2) a transducer. Specifically, the Office Action states "Chatigny et al. teaches an acoustic wave switch comprising: a substrate (16) with a cavity (10, 12, 14, 16)." However, in Chatigny, 10 is a transducer and 12 and 14 are transducer electrodes (*see* Chatigny at col. 3, lns. 14-18) not a substrate with an acoustic wave cavity formed therein and defined by a raised surface or mesa as claimed. The transducer 10 cannot be a part of the claimed acoustic wave cavity as the Examiner contends in the Office Action because the claims require a "transducer mounted on a surface of the acoustic wave cavity." If the transducer were a part of the acoustic wave cavity, the transducer would have to be mounted on itself which is an absurd claim construction. As such, Chatigny merely shows a substrate and transducer but does not disclose the claimed acoustic wave cavity as defined by the specification. Nor does Chatigny disclose an acoustic wave cavity defined by the claimed raised surface or mesa.

Thurn does not overcome the deficiencies of Chatigny. The Office Actions states "Thurn teaches a substrate (4) having a raised surface (3) (see Fig. 6 in column, lines 36-41)." However, Fig. 6 and Thurn at col. 6, lns. 36-41 clearly show and describe the "adapting layer disk 4" and the "material element disk 3" as part of "an ultrasonic transducer 1." The transducer 1 cannot be mounted on a substrate that is contained within the transducer 1 itself. As such, all that Thurn discloses is various components of a transducer. It does not disclose a transducer such as the transducer 1 mounted on a substrate having an acoustic wave cavity formed therein and defined by a raised surface or mesa as claimed.

Because neither Chatigny or Thurn teach a substrate with an acoustic wave cavity formed therein or defined by a raised surface or mesa, or a transducer mounted on such an acoustic wave

cavity, a prima facie case of obviousness has not been made and the rejection of the claims based on Chatigny and Thurn is believed to be improper.

Reconsideration and allowance of the claims at issue is respectfully requested.

Respectfully submitted,

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